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**State of Wisconsin
Governor Tony Evers**

January 22, 2024

The Honorable Clint P. Moses
Chair, Assembly Committee on Health, Aging and Long-Term Care
Room 12 West, State Capitol
PO Box 8953
Madison, WI 53708

The Honorable Rachael Cabral-Guevara
Chair, Senate Committee on Health
Room 323 South, State Capitol
PO Box 7882
Madison, WI 53707

Dear Representative Moses and Senator Cabral-Guevara:

Wisconsin Stat. § 153.05(2s) directs the Department of Health Services (DHS) and the Department of Employee Trust Funds (ETF) to jointly prepare an annual report on the activities of the Wisconsin Health Information Organization (WHIO). This report is submitted to the standing committees of the Legislature with jurisdiction over health issues, and can also be found online at <https://www.dhs.wisconsin.gov/publications/p01067-2022.pdf>.

Please find enclosed the 2022 annual report on the activities of WHIO. If you have any questions, please contact James G. Cooper, IS Business Automation-Specialist, DHS/Division of Medicaid Services, via email at JamesG.Cooper@dhs.wisconsin.gov.

Sincerely,

Handwritten signature of John Voelker.

John Voelker, Secretary
Department of Employee Trust Funds

Sincerely,

Handwritten signature of Kirsten L. Johnson.

Kirsten L. Johnson, Secretary-designee
Department of Health Services

Enclosures



2022 Annual Report to the Wisconsin Legislature on the Wisconsin Health Information Organization

Submitted by the Department of Health Services
January 2024

Executive Summary

The Wisconsin Health Information Organization (WHIO) was founded in 2008 as a public private partnership to maintain a claims repository and provide information to the public on behalf of the Wisconsin Department of Health Services (DHS). The purpose of this All-Payer Claims Database (APCD) is to ensure that state government and private health care industry organizations have access to a trusted, neutral source of data and information to improve the quality, safety, and cost-efficiency of health care in Wisconsin. Over time, the WHIO has continued to build on this vision by increasing the amount of data available for analysis, transitioning to a state-of-the-art technology system in 2019, and expanding the products and services it provides. The WHIO is governed by a multi-stakeholder Board of Directors which includes state government, health insurance company, employer, provider organization, clinician, and technology representatives to ensure that all perspectives are heard.

In 2022, the WHIO supplied multiple customers with de-identified Data Marts, access to pre-built reports, as well as custom data extracts and reports. Information was also made available to the public via the WHIO's InfoByte publication and a new public reporting project aimed at identifying health inequities called Healthy Metrics. In addition, the key initiatives below benefited from the data and services provided by WHIO.

- Exploration of Wisconsin's results in a four-state comparative study on low value care, defined as services that do not improve the patient's health outcome and may cause harm, including stewardship of a multi-stakeholder Low Value Care Task Force.
- Creation of a Medicaid Fee Schedule to compare Medicaid and commercial insurance payments.
- Private reports to provider organizations on the quality and cost-efficiency of their primary care physicians and specialists.
- Preparation for public and private reports on antibiotic stewardship for medical and dental practitioners.
- Multiple research studies to advance our understanding of disease treatment patterns.

Inherent within the public-private partnership model under which the WHIO was created was the expectation that state government and the private sector would contribute to the WHIO. The private sector has contributed data, human capital, and financial support throughout the WHIO's existence. WI state government continues to contribute the Medicaid data and representatives to the WHIO's Board of Directors but discontinued financial contributions after 2015. The WHIO is well positioned to support critical information needs of state government so that policy considerations and resource allocation decisions will provide the greatest benefit to Wisconsinites.

Background

In 2008, Wis. Stat. §153.01(3g) established a requirement for the Wisconsin Department of Health Services (DHS) to maintain a health care claims data repository and provide information to the public on the quality and cost efficiency of health care in Wisconsin. The WHIO was established in 2008 as a 501(c)(3), public-private partnership to fulfill this role on behalf of DHS. Founding organizations of WHIO envisioned that: 1) the WHIO data and information would be accessible to all health care stakeholders to answer a variety of questions; 2) the WHIO would serve as a source of unbiased information; and 3) the cost to maintain the WHIO would be shared by state government and the private sector. Over time, the WHIO has grown its volume of data, the sophistication of its technology and the number of diverse uses of the WHIO information to understand the health care delivery system in Wisconsin and the health of Wisconsinites.

The WHIO is governed by a multi-stakeholder Board of Directors (BOD) that includes state agencies, commercial payers, provider organizations, physicians, business representatives, and technology representatives. The 2022 BOD included representatives from the organizations listed below.

- Department of Health Services
- Department of Employee Trust Funds
- The Alliance
- Ascension Wisconsin
- Benefits Services Group Analytics
- Business Health Care Group
- Medical College of Wisconsin
- Prevea Health
- Quartz Health Solutions
- UnitedHealthcare
- Wisconsin Physicians Service Health Insurance
- Wisconsin Collaborative for Healthcare Quality
- Wisconsin Statewide Health Information Network

WHIO Information System

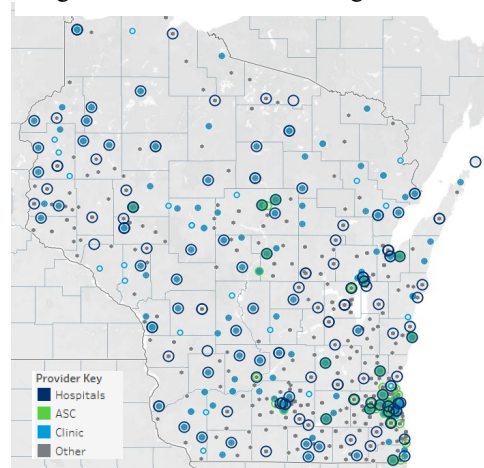
As of the end of 2022, the WHIO information system contained information on 5.1 million insured lives and over \$311 billion in health care spending dating back to 2017. This includes 564 million medical claims (\$275 billion) and 173 million pharmacy claims (\$36 billion). The WHIO claims data includes eligibility, medical, and pharmacy data on Medicaid, Medicare Advantage, commercial, and self-funded employer health plans. Insurance claims are voluntarily submitted to the WHIO by DHS, multiple health insurance companies, and self-funded employers who are committed to high quality, lower cost, accessible health care in Wisconsin.

In 2019, the WHIO transitioned its data and technology to a state-of-the-art, cloud environment so that new products and services that meet today's data and information needs are available to Wisconsin organizations. These products include de-identified claims-only Data Marts and secure, web-accessible reports. Custom services include data extracts, analytics, and reporting. The WHIO is the only data system that can provide objective information on the full spectrum of care provided to Wisconsinites.

The WHIO provides:

- Facts on preventive care, one-time treatments, and chronic diseases.
- Information on emergencies, hospitalizations, outpatient procedures, radiology tests and procedures, laboratory tests, durable medical equipment, transport services, and prescription medications.
- Reports by hospital, ambulatory surgery centers, urgent care centers, clinics, rehabilitation centers, home health services, long term care facilities, and individual clinicians.
- Insights on Wisconsinites of all ages.
- Statistics on all communities in Wisconsin by organization, county, region, and the entire state (Figure 1).

Figure 1. WHIO Data Coverage in WI



Currently, 25 states are supporting a statewide APCD with more under development as the known value of an APCD increases with experience. All statewide APCDs, except Wisconsin, require insurance companies in their state to submit claims data to the APCD to ensure that all communities in their state are well represented. The WHIO is unique in its voluntary claims submission model. Today, all but one insurance company contributes its claims data to the WHIO, as well as self-funded employers and the Medicaid program. In addition to the WHIO's current data contributors, the WHIO maintained its ability to receive the Medicare Fee-for-Service claims data under the Center for Medicare and Medicaid Services (CMS) Qualified Entity Certification Program (QECF), filling a gap that has existed in Wisconsin for many years.

2022 WHIO Key Accomplishments

In 2022, the WHIO provided information on the value of the health care received in Wisconsin, health equity, and many other important topics to Wisconsin. Highlights of these accomplishments are below.

Public Information – available on the WHIO Website (www.whio.org)

The publications below were provided by the WHIO to the public for free in 2022.

- *InfoByte: Antibiotic Prescribing in WI* – A brief report that quantifies antibiotic prescribing practices including high-volume antibiotic prescribers. The overuse of antibiotics gives bacteria a chance to adapt and become resistant to antibiotics. People who encounter antibiotic resistance can experience severe illness, which may require hospitalization and, in some cases, may lead to death.
- *Use of Opioids from Multiple Providers in Persons without Cancer* – This report contains valuable information about opioid prescriptions written by multiple clinicians for the same person by county. Studies have shown that people who are prescribed opioids from multiple prescribers or obtain their opioid prescriptions from multiple pharmacies are

more likely to overdose compared to those who receive their opioid prescription from only one prescriber or pharmacy. This report was published in accordance with the WHIO's requirements as a Qualified Entity under the CMS Qualified Entity Certification Program.

- *Disparities in Initial Opioid Prescribing* – This brief report provides information on long duration opioid prescriptions, defined as seven (7) days or more, using the nationally recognized Pharmacy Quality Alliance measure. Long duration opioid prescriptions are important since the likelihood of addiction increases the longer a person uses opioids. This report was published in conjunction with the Healthy Metrics program described below.
- *Disparities in Use of Opioids and Benzodiazepines* – This brief report (Appendix A) looks at the use of opioids and benzodiazepines at the same time for more than 30 days by Wisconsin county and age ranges. Using these two drug classes at the same time increases the risk of accidents such as falls and unintended overdoses. This report was published in conjunction with the Healthy Metrics program described below.

Health Equity

In July 2021, the WHIO became a collaborating partner in the Healthy Metric project (www.healthymetric.org). The goal of Healthy Metric is to reduce health disparities and improve health in Wisconsin. To achieve this goal, Healthy Metric connects health systems, payers, and communities with academic institutions to build sustainable systems that measure, monitor, and reduce disparities through best practices and evidence-based innovations. Additional collaborators in the Healthy Metric program include the UW-Madison School of Medicine and Public Health, Medical College of Wisconsin, Marshfield Clinic Research Institute, and the Wisconsin Collaborative for Healthcare Quality. This program is funded by the Wisconsin Partnership Program and Advancing a Healthier Wisconsin Endowment. The first Healthy Metrics reports were released in August 2022 and include the disparities reports on opioid use described above.

Health Care Quality and Cost-Efficiency

Low Value Care - In 2020, the WHIO participated in a multi-state research study conducted by V-BID Health to determine if low value care is present in Wisconsin, and if so, how does Wisconsin compare to other states. The results of this study were published in the white paper *Utilization and Spending on Low Value Medical Care Across Four States, VOL2* in May 2022. Low value care is defined as “patient care that offers no benefit in specific clinical scenarios, which can lead to patient harm and unnecessary spending” and is a quality, safety, health equity, and cost-efficiency issue that contributes to the inappropriate use of scarce health care workforce resources in Wisconsin.

In response to the V-BID Health report, the WHIO supported the Low Value Care Task Force in 2022 composed of health insurance company, employer, provider organization, physician, and state agency representatives. The Task Force reviewed the Wisconsin results from the V-BID Health study and determined that a statewide report on low value care in Wisconsin should be made available to the public to raise awareness of the negative impact of low value care in Wisconsin.

Quality and Cost Efficiency of Care – Prior to the COVID-19 pandemic, multiple studies indicated that Wisconsin ranked in the top 10 of states for health care quality due to the collective efforts of multiple organizations over the past 20 years. Wisconsin also ranked in the bottom 10 (most expensive) of states for the cost of its health care.

In 2021, the Business Health Care Group released its second Wisconsin Physician Value Study, which evaluated the quality of care and cost efficiency of primary care physicians and the cost efficiency of specialists performing ten procedures using multiple industry standard metrics. The results indicated that Wisconsin could have saved \$382,350,000 per year if the primary care physicians and specialists in the lower 50th percentile had performed like their peers in the upper 50th percentile on the metrics in the study. In 2022, the WHIO created and distributed to provider organizations private, summary-level reports from the Wisconsin Physician Value Study through its Applied Insights reporting portal. These provider organizations are using this information to benchmark their performance to other Wisconsin organizations and to prioritize resources to improve the quality and cost-efficiency of their care.

Commercial and Medicaid Rates – In 2022, the WHIO delivered the Medicaid Fee Schedule to DHS (Division of Medicaid Services). This fee schedule includes the average statewide payment for commercial insurance compared to Medicaid for all procedure codes (CPT codes) and inpatient diagnostic groupings (DRG codes). Medicaid is using this data to benchmark Medicaid payments and to answer questions about the differences between commercial and Medicaid rates.

Public Health

The overuse of antibiotics to treat infections is the root cause of superbugs – mutated strains for which there are few treatment alternatives – and antibiotic resistance. In addition to this health impact, the overuse of antibiotics is wasteful spending. A February 2021 poll of provider organizations conducted by DHS indicates that only half of the respondents have improvement activities to address antibiotic prescribing, and that these efforts are hampered by a lack of reports that compare prescriber behaviors to peer groups.

In 2022, the WHIO, working with the DHS Antibiotic Stewardship Program and the Business Services Group Analytics began a comprehensive reporting project to quantify antibiotic use in Wisconsin. These reports will include public statewide reports and private provider organization reports on the use of antibiotics to treat medical issues. Additionally, there will be public statewide reports and private dental provider organization reports to treat dental issues. The medical statewide report is planned to be released in early 2023 and the dental statewide report later in 2023.

Research

The WHIO information system includes unique technical capabilities that are not available in other state's APCD, such as an enterprise master person index, which creates a de-identified, persistent identification number for each insured life in the WHIO's data warehouse. Using this technology and other HIPAA compliant methods, the WHIO initiated a new service to researchers in 2022 which results in a de-identified Data Mart created from multiple data types (e.g., claims, registry, electronic medical record).

In 2022, the WHIO supported research studies in Wisconsin including studies on COVID-19, sickle cell disorders, thyroid cancer screening, epilepsy, and substance use. These studies will

contribute to our collective knowledge of important diseases and treatments as these results are published. In addition, the WHIO data was used to identify and quantify co-morbid conditions that are highly associated with sleep apnea using state-of-the-art statistical models.

Strategic Uses of WHIO that State Leaders Can Embrace Now

Over the past several years, the health care delivery system has been changing rapidly due to more precise diagnostic tests, as well as new pharmaceutical, genetic, and other therapeutic advances. At the same time, Wisconsin's population is aging, experiencing more chronic conditions, and diseases like Type 2 diabetes are being experienced in younger people. These and many other factors have led to higher health care costs. Additionally, innovative payment models have lagged behind rising costs in part due to a lack of easily accessible information to monitor these changes. As Wisconsin continues its recovery from the disruption of the COVID-19 pandemic, which accelerated a health care workforce shortage, the opportunity to reimagine the health care delivery system based on the needs of citizens and the economic health of the state is more urgent than ever.

Summary

Throughout 2022, the WHIO continued to expand its capabilities and value to Wisconsin by increasing the number and complexity of projects supported. But more can be accomplished. While there are many factors that contribute to the performance of Wisconsin's health care delivery system, high-quality, safe, affordable health care that serves the needs of the people of Wisconsin must be the highest priority. The WHIO is poised to meet Wisconsin's demand for health care information now and into the future.

Appendix A:
Disparities in Use of Opioids and Benzodiazepines

Disparities in Use of Opioids and Benzodiazepines

A Healthy Metric 2022 Brief Report for Wisconsin



Healthy Metric

Advancing Health Equity in Wisconsin

Report Goal

Our goal is to determine how often opioids and benzodiazepines are used at the same time by comparing rates across Wisconsin counties and by age groups.

About Healthy Metric

Healthy Metric is a partnership between UW-Madison, the Medical College of Wisconsin, Marshfield Clinic Research Institute, the Wisconsin Collaborative for Healthcare Quality, and the Wisconsin Health Information Organization that aims to eliminate

health disparities in Wisconsin through collaboration, measurement, and interventions.

About the Measure

Use of opioids and benzodiazepines: The percentage of individuals with concurrent use of opioids and benzodiazepines for greater than or equal to 30 cumulative days during the measurement year. This measure is endorsed by the Pharmacy Quality Alliance (PQA).

Measure Goal

Lower rates are better.

Data



Data includes individuals from the Wisconsin Health Information Organization (WHIO) who have prescription claims for opioids in 2019, 2020, or 2021.



Contact

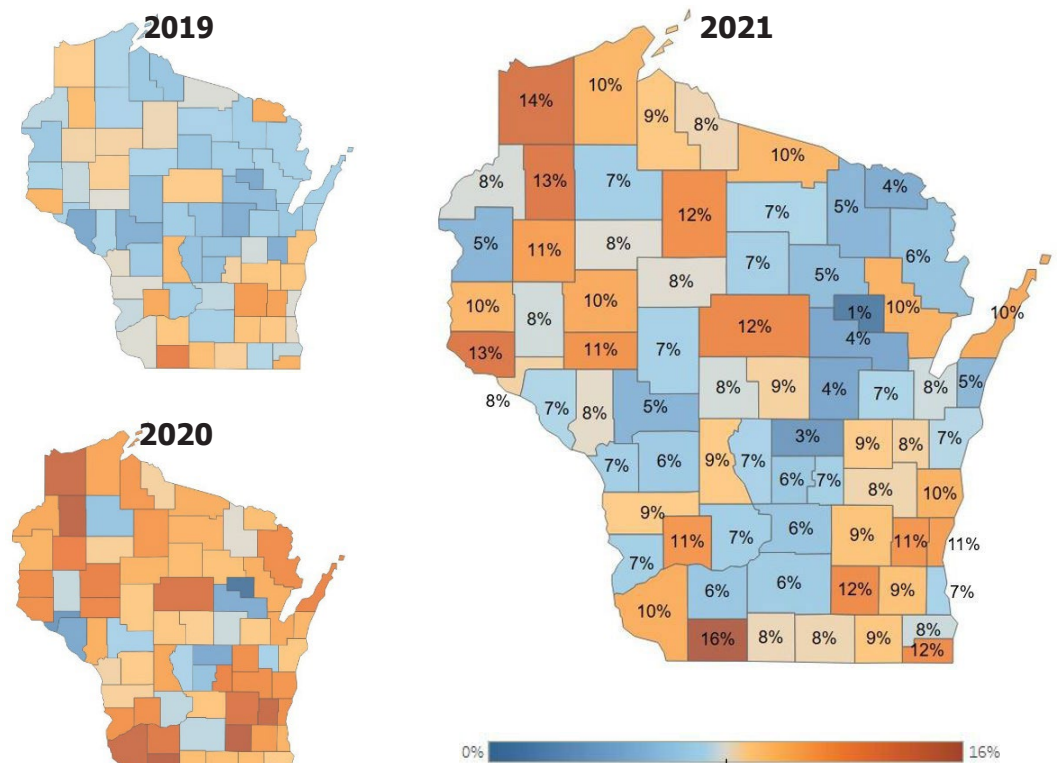
For more information about Healthy Metric, visit: www.healthymetric.org

Executive Summary

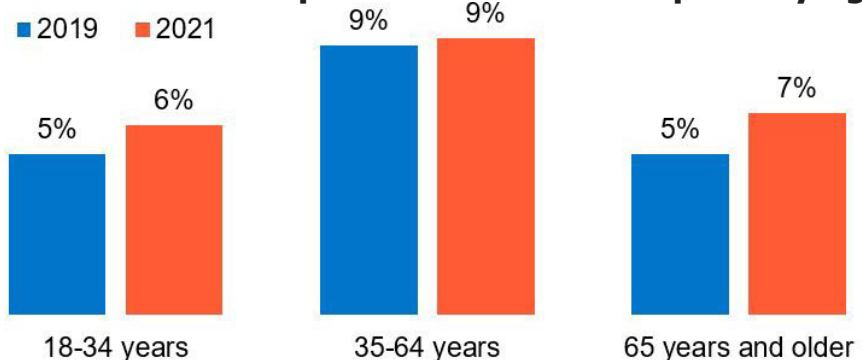
There was an increase in the use of opioids and benzodiazepines at the same time when COVID-19 entered Wisconsin, a trend that began to reverse in 2021.

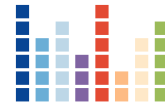
- Across Wisconsin counties, simultaneous use of these medications varies substantially, from as low as 1% up to 16%.
- Middle aged adults are experiencing the highest use of opioids and benzodiazepines at the same time. To date, efforts to reduce the concurrent use of these medications have focused on older adults.

Concurrent Use of Opioids and Benzodiazepines by County



Concurrent Use of Opioids and Benzodiazepines by Age





Background

Benzodiazepines for conditions such as anxiety or insomnia and opioids for pain management may lead to safety risks even when only one medication is used. When used at the same time, there is an increased risk of accidents such as falls, and unintentional overdose deaths due to respiratory depression. The CDC recommends that clinicians should avoid prescribing opioids and benzodiazepines at the same time whenever possible. Improving the way opioids and benzodiazepines are prescribed helps patients to recover better or manage longer-term illnesses in a safe manner while reducing these risks.

Health Disparities Indicators

Geography and age can be important contributors to health disparities. Characteristics of geographic areas (e.g., built and natural environment, clinical care practices and services offered, and social and economic conditions) differ across the state. Using geography as an indicator to evaluate health disparities at the community, county, or regional level is helpful in determining if disparities exist in the state, and if so, where. Age is associated with a wide range of factors such as frailty and cognitive decline that increase health risks and can highlight differences in how care is delivered.

Taking Action

Resources for Taking Action to Reduce Disparities

- [Prescribing Opioids: Resources for providers](#)
- [Opioid Crisis and Pain Management](#)
- [Improving Opioid Prescribing Policy Brief](#)
- [What Works for Health: Opioid Prescribing](#)
- [The Community Guide: Opioid Prescribing](#)

Questions to Consider for Taking Action

- Are all providers and patients aware of the risks of concurrent use of opioids and benzodiazepines?
- Are some patients more likely to be prescribed opioids than explore/have access to other pain relief solutions (e.g., surgery or physical therapy)?
- What are some of the barriers to accessing mental healthcare?
- What social and environmental factors contribute to anxiety, insomnia, and other health conditions that are treated with benzodiazepines?

About the Funders

Advancing A Healthier Wisconsin Endowment (AHW): Driven by a vision for a healthier Wisconsin, the Advancing a Healthier Wisconsin Endowment reaches statewide, propelling the most promising work and ideas to build a healthier Wisconsin for generations to come.

Wisconsin Partnership Program (WPP): WPP represents a far-reaching commitment by the University of Wisconsin School of Medicine and Public Health to greatly improve the health of people in Wisconsin for years to come.

Healthy Metric is a partnership between:

